

Amendment
Serial No.10/771,943

5000-1-518

REMARKS

Reconsideration of all grounds of rejection, and allowance of the pending claims are respectfully requested in light of the above amendments and the following remarks.

Claims 1-19 remain pending herein. Claim 20 has been canceled without prejudice or disclaimer; claim 1 has been amended to include the subject matter of claim 4; claims 3 and 6 have been rewritten into an independent format; claim 16 has been amended to expressly recite that the coupled signal is transmitted without using an Erbium Doped Fiber Array (EDFA), support being found in the specification at least at page 5, lines 5-7.

At the outset, Applicant notes with appreciation the indication in the Office Action that claims 3-8 and 20 recite allowable subject matter. Applicant respectfully submits that claims 3 and 6 have been rewritten into independent form and claim 19 has been amended to include the allowable subject matter of claim 20.

Claims 6 and 20 (as added into claim 19) have been edited to remove the recitation of a "second" WDM coupler, thereby overcoming objections thereto.

Claims 1-2 are provisionally rejected under the judicially-created doctrine of obviousness-type double patenting over claim 14 of co-pending application No. 10/811,600 in view of Sala *et al.* (U.S. 7,245,624) ("Sala"). Claims 1 and 9-15 stand rejected under 35 U.S.C. §103(a) over Sala in view of Wong (U.S. 6,058,227) and further in view of Kuo *et al.*, (U.S. 7,272,321) ("Kuo"). Claims 16-19 stand rejected under 35 U.S.C. §103(a) over Sala in view of Kuo. Applicant respectfully traverses these grounds of rejection at least for the reasons indicated herein below.

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First with regard to the double patenting rejection of claims 1-2, Applicant respectfully submits that the incorporation of the recitation of claim 4 into claim 1 makes the double patenting rejection moot. Applicant respectfully requests reconsideration, as it is believed that at least because the recitations of claim 4 have been added to claim 1, that claims 1-2 patentably distinguish from claim 14 of the cited application.

With regard to the combination of Sala, Wong and Kuo, Applicant respectfully submits that the Office Action acknowledges that "neither Sala nor Wong teaches dividing the optical signals into two different signals (i.e. a combination broadcast/image signals and a communication signal (an IP signal that is optically modulated)). However, Kuo teaches WDM couplers 462 and 464 divide wavelengths 11 and 12."

In response to the aforementioned paragraph, Applicant respectfully submits that **Kuo discloses that signals 11 and 12 are Tx/Rx, meaning they are not an optical signal separated into two downstream signals (e.g. a combination broadcast/image signal and a communication signal) having different frequencies (one signal is upstream and one is downstream).** Thus, the combination of Sala, Wong and Kuo at least fails to disclose or render obvious claim 1, which now recites frequency components are assigned to each ONT with specific broadcasting and/or image transmission frequencies according to ONTs, so as to prevent broadcasting and/or image signals selected by each ONT from colliding with each other on an optical line (the allowable subject matter recited in claim 4). The different frequency component for broadcasting and image signals assigned to each ONT are for downstream transmission from the OLT, which patentably distinguishes from the combination of Sala, Wong and Kuo. For at least the aforementioned reasons, claim 1 would not have been obvious to a person of ordinary

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skill in the art at the time of invention in view of the combination of references. Nor would the combination of elements, as recited in claim 1, have been obvious as being within the ordinary level of skill in the art at the time of invention.

With regard to claim 16, this claim has been amended to clarify that the coupled signal is transmitted without using an Erbium Doped Fiber Array (EDFA). One of the advantages of the claimed invention is that unlike known EPON systems for conventional broadcasting require an EDFA , as well as during digital broadcasting, when there is an increased quantity of broadcasting channels (specification; at least at page 4, lines 1-6 and page 5, lines 5-8). Present claim 16 benefits from an advantageous structure that does not require an EDFA.

In contrast to the claimed invention, Applicant respectfully submits that the combination of Sala, Wong and Kuo at best is conventional, and would require employment of an EDFA for operation. With regard to the combination of references, Sala teaches that the transmission is according to known standards (which would require an EDFA) and Wong shows an EDFA in each of the groups (FIG. 2) and discloses an EDFA at col. 3, lines 22-25 and lines 39-45. Kuo was not cited for such a purpose, and does not disclose what it alleged in the office Action. Thus, in combination with Sala and Wong (and Kuo), the combination would have failed as a whole to disclose or render claim 16 obvious to an artisan at the time of invention.

For at least the above reasons, claims 1 and 16 would not have been obvious to a person of ordinary skill in the art over the combination of references. Nor would the combination of elements, as recited in claims 1 and 16, have been obvious as being

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within the ordinary level of skill in the art at the time of invention (*KSR International v. Teleflex*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007)).

Reconsideration and withdrawal of the rejection of claims 1 and 16 are respectfully requested.

Applicant further notes that with regard to claims 2, 9-15 and 17, these claims are believed to be allowable at least for dependency from one of respective independent claims 1 and 16, and because of a separate basis for patentability. For example, claim 9 recites "wherein said converted combined signal is demodulated into a plurality of frequencies for an ONT of said multiple ONTs" which is not disclosed, suggested or otherwise rendered obvious by the combination of Sala and Kuo.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

While no additional fees are believed due at this time, please credit any overage or charge any deficiency to Deposit Account 502-470.

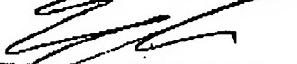
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Should the Examiner deem that there are any issues that may best resolved by telephone, please contact Applicant's attorney of record at the below-noted telephone number.

Respectfully submitted,

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